INFORMATION

SECOND INTERNATIONAL MACHINE-BUILDING EXHIBITION

The second International Exhibition "Machine-Building-97" took place in the Sokolniki Exhibition Center in Moscow on November 24 – 28, 1997. Over 200 enterprises, organizations and companies from Russia, Belarus, Ukraine, Moldavia, Lithuania, Latvia, Germany, Switzerland, USA, Japan, and Italy presented their products and services.

Despite the special purpose of the exhibition, the organizers let the enterprises present the entire spectrum of their goods and services to potential consumers.

The exhibition also presented materials and products from the ceramic and glass industry.

The leading Russian producer of parts from hard alloys, ceramics, and superhard materials, VNIITS (Moscow), presented a whole spectrum of ceramic tool materials. Depending on the problems to be solved, the consumer could choose any of the following:

alumina ceramics with additives for production of tools used for rapid turning of cast iron and steel parts;

oxide-carbide ceramics based on Al_2O_3 and TiC with additives for finishing and semifinishing cutting treatment of carbon and alloy heat treated steels, malleable gray cast iron, graphite, etc.;

a laminated ceramic material (from a high-strength hard-alloy substrate and one or several layers of cutting material) for finishing and semifinishing treatment of carbon and alloy hardened steels and various kinds of cast iron, etc.;

nitride ceramics with oxide additives for processing virtually all kinds of cast iron at high speed and alloys based on nickel and cobalt;

reinforced ceramics (a ceramic composite material based on Al_2O_3 reinforced by whisker single crystals of silicon carbide) for processing nickel alloys, hardened high-alloy and high-speed steels and cast iron.

Abrasive plants presented a wide range of their products. The Il'ich plant (St. Petersburg) offered the consumers grinding wheels of various profiles from electrocorundum materials and silicon carbide on ceramic binders; polishing bars for honing, superfinishing, sizing and straightening diamond wheels from electrocorundum materials, silicon carbide, artificial and synthetic diamonds on ceramic binders; articles from corundum ceramics for lining the equipment operating under conditions of aero- and hydroabrasive wear.

The Belgorod abrasive plant demonstrated disks from a bulk polishing sheet (with abrasive material of electrocorundum or silicon carbide), polishing water-resistant cloth for processing metals and alloys, and other materials.

The Kosulinsky abrasive plant, which specializes in production of abrasive tools on ceramic and bakelite binders, presented grinding wheels of various standard sizes and characteristics with addition of a complex filler or without it; electrocorundum roughing wheels, wheels for cutting metals and sharpening chain saws, wheels for cutting bricks and glass, grinding segments etc.,

The Luzhsky abrasive plant presented a wide range of abrasive tools on ceramic and bakelite binders, refractory graphite-containing crucibles (suitable for any kind of furnace operating on any kind of fuel) for casting nonferrous metals and their alloys, for melting and dispensing nonferrous metals, tapping metals and melting precious stones; supports for mounting crucibles on them; parts from high-density ceramics, i.e., cutting plates (based on silicon nitride ceramics) for efficient fine and semifine turning and milling of carbon structural and tool steels; parts for structures with elevated wear resistance (based on high-density ceramics from boron oxide); flat plates for linings, nozzles for sand blasting, bowls and parts for filters of paper-making machines, etc.

The VNIIASh Company (St. Petersburg), engaged in the development of manufacturing technologies for all kinds of abrasive products and their use in abrasive processing, presented tools from superhard materials, i.e., cubic boron nitride and aluminum, and devices and methods for nondisruptive control of abrasive parts and other materials, i.e., refractories, ceramics, cast iron.

The ceramic industry was represented at the exhibition by fiber glass light-transmitting building structures; fiber glass windows, doors, partitions, structures for enclosing balconies, one- and two-dimensional double-glass planes, fiber glass profiles of various colors, etc. (Karboterm Research and Production Association in cooperation with Canadian Inline Fiberglass Ltd.).

The Lisma Trade House offered various household light devices and various-purpose lamps.

A wide range of manufacturing equipment for the ceramic and glass industry was presented.

The Drobmash Company (Vyksa) advertised the equipment for the production of building materials based on mineral raw materials and waste, namely, crushers of various standard sizes and types (cone, rotor, hammer) and various mills.

The Institute of Powder Metallurgy (Moscow) presented its advanced designs and pressing equipment.

The Tema Company (Rybinsk) offered a wide range of equipment for fabricating powders and granules; crushers, mills for wet and dry milling, granulators, spray dryers, separators, electric and gas furnaces for a temperature range of 100 – 1800°C with various gas media for sintering, annealing, metallization (chamber, tunnel, vacuum, hydrogen, etc.).

The Nakal Company demonstrated its thermal equipment (furnaces with a capacity of 5 – 3000 dm^3 operating at up to 1650°C).

Various seminars, meetings, talks between the leaders of producer plants, managing organs and representatives of individual enterprises were conducted.

The exhibition promoted wide exchange of information and new contacts between the producers and consumers of machine-tool products.

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